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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,469

11/28/2006

Yim-Bun Patrick Kwan

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GRAY ROBINSON, P.A.

P.O. Box 2328

FT. LAUDERDALE, FL 33303-9998

EXAMINER

THOMAS, BRANDI N

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,469	Applicant(s) KWAN ET AL.	
	Examiner BRANDI N. THOMAS	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-36 is/are pending in the application.
- 4a) Of the above claim(s) 20-22, 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-32 and 34-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/26/09;12/30/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. Acknowledgement is made of receipt of Information Disclosure Statement(s) (PTO-1449) filed 10/26/09 and 12/30/09. An initialed copy is attached to this Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 23-32 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eurlings et al. (6833907 B2) in view of Lee et al (2004/0008968 A1).

Regarding claim 23, Eurlings et al discloses, in figures 1 and 2, an apparatus comprising: an optical assembly and a feeder device (figure 1), said optical assembly having a plurality of optical elements (10, 12, 14, 16, 18, 20, and 22) forming a projection objective or an illuminating system (IL) and a beam path produced therein (col. 8, lines 20-22), said feeder device (12, exchanger) being operable to interchangeably into the beam path to remove from the beam path (col. 9, lines 18-24), at least one optical element (10) of said plurality of optical elements (10, 12, 14, 16, 18, 20, and 22) (figure 1) (col. 9, lines 18-24) but does not specifically disclose at least one optical element being substantially dynamically decoupled from the remaining ones of said plurality of optical elements of the optical assembly. Lee et al. discloses at least one optical element being substantially dynamically decoupled from the remaining ones of said plurality of optical elements of the optical assembly (section 0015 and claim 34). Therefore it would have

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been obvious to one having ordinary skill in the art at the time of the invention to combine the device of Eurlings et al. with the optical elements of Lee et al. for the purpose of separating the optical element (interchangeably) to be used from the array/plurality of optical elements to be used in the beam path.

Regarding claim 24, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further discloses, in figures 1 and 2, an apparatus wherein said optical assembly (figure 1) includes a housing (figure 1) having an opening adapted to the dimensions of said at least one optical element (10), said optical element being inserted into the beam path and removed from the beam path by way of said opening (figure 1) (col. 9, lines 13-17).

Regarding claim 25, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an optical assembly (figure 1) having a plurality of optical elements (10, 12, 14, 16, 18, 20, and 22) forming a projection objective or an illuminating system (IL) and a beam path produced therein (col. 8, lines 20-22), wherein said feeder (12) is connected to a structure dynamically decoupled from the optical assembly (figure 1) (col. 9, lines 18-24).

Regarding claim 26, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an optical assembly (figure 1) having a plurality of optical elements (10, 12, 14, 16, 18, 20, and 22) forming a projection objective or an illuminating system (IL) and a beam path produced therein (col. 8, lines 20-22), further comprising a lifting device, said at least one optical element (10) being positioned and/or fixed in the beam path via said lifting device (12) (col. 9, lines 18-24).

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Regarding claim 27, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an optical assembly (figure 1) having a plurality of optical elements (10, 12, 14, 16, 18, 20, and 22) forming a projection objective or an illuminating system (IL) and a beam path produced therein (col. 8, lines 20-22), wherein said lifting device (12) is dynamically decoupled from the optical assembly (figure 1) and connected to the structure dynamically decoupled from the optical assembly (figure 1) (col. 9, lines 18-24).

Regarding claims 28-30, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an apparatus wherein said apparatus further comprises a holding device which serves as a stop and/or for fixing said at least one optical element in the beam path. It is inherent that the lens would be held by a holding means this being reasonably based upon the lens being maintained at a particular position to receive the beam.

Regarding claim 31, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an apparatus, wherein spring elements are provided between said lifting device (12) and said at least one optical element (10) (the exchanger may comprise any suitable for means for inserting and removing the optical element) (col. 9, lines 18-24).

Regarding claim 32, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an apparatus, wherein said feeder device and/or said lifting device (12) are arranged outside the optical assembly (figure 2).

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Regarding claim 34, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an apparatus, wherein said at least one optical element (10) is comprises a diaphragm, in particular a revolving disc diaphragm (col. 9, lines 18-24).

Regarding claims 35 and 36, Eurlings et al and Lee et al disclose and teach of an apparatus as shown above and Eurlings et al further Eurlings et al. discloses, in figures 1 and 2, an apparatus but does not specifically disclose wherein it is used in a projection exposure machine for microlithography in the field of EUVL for producing semiconductor components. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiated the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (Ex parte Mashim, 2 USPQ2d 1647 (1987)).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDI N. THOMAS whose telephone number is (571)272-2341. The examiner can normally be reached on Monday - Thursday from 6-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandi N Thomas/
Examiner
Art Unit 2873

BNT

/Jessica T Stultz/
Primary Examiner, Art Unit 2873